

**IN THE CLAIMS:**

**Please amend the claims so as to read as follows:**

1. (Cancelled, without prejudice)
2. (Cancelled, without prejudice)
3. (Cancelled, without prejudice)
4. (Cancelled, without prejudice)
5. (Currently Amended) An optical disc including a substrate having pits having at least two different depths formed therein, wherein  
the pits have their depths adjusted such that polarity of a signal  
representing difference in intensity distribution of a reflected light beam along a  
tangential direction of a pit string differ at a pit having a first depth from a pit  
having a second depth and information is recorded by a change of said polarity.
6. (Currently Amended) An optical disc including a substrate having pits having at least two different depths formed therein, wherein  
information is recorded in accordance with a change of a polarity of a signal  
representing difference in intensity distribution of a reflected light beam along a  
tangential direction of a pit string, at said pits having at least two different depths.



7. (Currently Amended) An optical disc including a substrate having pits having at least two different depths formed therein, wherein  
information is recorded by a combination of a change of a signal in accordance with quantity of reflected light beam from said pits having at least two different depths and a change of a signal indicative of a difference in intensity distribution of the reflected light beam along a tangential direction of a pit string.
8. (Currently Amended) An optical disc including a substrate having pits having at least two different depths formed therein, wherein  
main information is recorded by a form of the pits, and additional information is recorded by ~~the depth of a pit~~ a difference of the depths of the pits.
9. (Original) The optical disc according to claim 8, wherein the pit having said additional information is formed deeper than a prescribed depth.
10. (Original) The optical disc according to claim 8, wherein  
said additional information is a synchronizing signal for reproducing said optical disc.
11. (Original) The optical disc according to claim 8, wherein said additional information is address information corresponding to said main information.



12. (Original) The optical disc according to claim 8, wherein said additional information is a de-scramble key of said main information.
13. (Original) The optical disc according to claim 8, wherein said additional information is error correction information for said main information.
14. (Original) The optical disc according to claim 8, wherein unit of recording of said additional information is recorded in association with a unit of recording of said main information.
15. (Withdrawn) An optical disc reproducing device, comprising:
  - a first detecting unit detecting a first signal in accordance with a quantity of reflected light beam from an optical disc;
  - a second detecting unit detecting a second signal representing a difference in intensity distribution of the reflected light beam along a tangential direction of a pit string of said optical disc; and
  - a reproducing unit reproducing information recorded on said optical disc based on the first signal detected by said first detecting unit and the second signal detected by said second detecting unit
16. (Withdrawn) The optical disc reproducing device according to claim 15, wherein said reproducing unit reproduces information recorded on said optical disc based on polarity of the second signal detected by said second detecting unit.



17. (Withdrawn) The optical disc reproducing device according to claim 16,  
wherein said reproducing unit reproduces three-valued information recorded on said  
optical disc.
18. (Withdrawn) The optical disc reproducing device according to claim 15,  
wherein  
said reproducing unit includes a first comparing circuit comparing  
the second signal detected by said second detecting unit with first  
reference value and outputting a positive signal when voltage of said  
second signal is not lower than said first reference value,  
a second comparing circuit comparing the second signal detected  
by said second detecting unit with a second reference value, and  
outputting a negative signal when voltage of said second signal is not  
higher than said second reference value, and  
an additional circuit adding the positive signal output from said  
first comparing circuit and the negative signal output from said second  
comparing circuit.



19. (Withdrawn) The optical disc reproducing device according to claim 15,

wherein

said reproducing unit includes a first comparing circuit comparing  
the second signal detected by said second detecting unit with a first  
reference value,  
a second comparing circuit comparing the second signal detected  
by said second detecting unit with a second reference value, and  
a latch circuit holding a result of comparison by said first  
comparing circuit and a result of comparison by said second comparison  
circuit, at a point transition of the first signal output from said first  
detecting unit.

20. (Withdrawn) An optical disc reproducing device, comprising:

a main information reproducing unit reproducing main  
information by a reflected light beam from a pit formed on a substrate of  
the optical disc; and  
an additional information reproducing unit reproducing additional  
information by detecting a depth of said pit.

21. (Withdrawn) The optical disc reproducing device according to claim 20, further

comprising a controller limiting reproduction of the main information by said  
main information reproducing unit when said additional information reproducing  
unit is unable to reproduce said additional information.



22. (Withdrawn) The optical disc reproducing device according to claim 20, further comprising:

a display unit displaying, when said additional information reproducing unit is unable to reproduce said additional information, the fact that the additional information cannot be reproduced.

23. (Withdrawn) The optical disc reproducing device according to claim 20, further comprising:

a servo control unit outputting a tracking servo signal; and  
a controller outputting the tracking servo signal output from said servo control unit when said additional information reproducing unit is unable to reproduce said additional information.

24. (Withdrawn) The optical disc reproducing device according to claim 20, further comprising:

a servo control unit outputting a tracking servo signal; and  
a controller inverting polarity of the tracking servo signal output from said servo control unit when said additional information reproducing unit is unable to reproduce said additional information.



25. (Withdrawn) The optical disc reproducing device according to claim 20, further comprising:
- a counter counting number of additional information; and
  - a controller controlling reproduction of the additional information by said additional information reproducing unit based on the value of said counter.
26. (Withdrawn) The optical disc reproducing device according to claim 20, comprising a controller controlling said additional information reproducing unit so that the additional information is reproduced, when contents of the main information cannot be reproduced by said main information reproducing unit.
27. (Withdrawn) The optical disc reproducing device according to claim 20, further comprising a controller controlling said additional information reproducing unit such that the additional information is reproduced in synchronization with reproduction of the main information by said main information reproducing unit.
28. (Withdrawn) The optical disc reproducing unit according to claim 20, further comprising a controller limiting reproduction of the main information by said main information reproducing unit when said additional information cannot be reproduced by said additional information reproducing unit.



29. (Withdrawn) A method of reproduction, comprising the steps of:
- detecting a signal based on a quantity of light beam reflected from an optical disc;
  - detecting a second signal indicative of a difference in intensity distribution of the reflected light beam along a tangential direction of a pit string on said optical disc;
  - reproducing the main information recorded on said optical disc based on said detected first signal; and
  - reproducing additional information recorded on said optical disc based on said detected second signal.
30. (Withdrawn) The method of reproduction according to claim 29, wherein said step of reproducing additional information recorded on said optical disc includes the step of reproducing the additional information recorded on said optical disc based on polarity of said second signal.
31. (Withdrawn) The method of reproduction according to claim 30, wherein said step of reproducing additional information recorded on said optical disc includes the step of reproducing three-valued information recorded on said optical disc.



32. (Withdrawn) The method of reproduction according to claim 29, wherein  
said step of reproducing the additional information recorded on  
said optical disc includes the step of comparing said second signal with a  
first reference value and outputting a positive signal when voltage of said  
second signal is not lower than said first reference value;  
the step of comparing said second signal with a second reference  
value and outputting a negative signal when voltage of said second signal  
is not higher than said second reference value, and  
adding said output positive signal and the negative signal.
33. (Withdrawn) The method of reproduction according to claim 29, wherein  
said step of reproducing additional information recorded on said  
optical disc includes the steps of:  
comparing said second signal with a first reference  
value,  
comparing said second signal with a second  
reference value, and  
holding the result of the comparison of said second  
signal with said first reference value and the result of  
comparison of said second signal with said second  
reference value, at a point of transition of said first  
signal.



34. (Cancelled, without prejudice)

35. (Cancelled, without prejudice)

36. (Cancelled, without prejudice)

37. (Cancelled, without prejudice)

38. (Cancelled, without prejudice)

39. (Cancelled, without prejudice)

40. (Cancelled, without prejudice)

41. (Cancelled, without prejudice)